

ABSTRACT

A switching power source is capable of conducting constant-current drooping control on a load, increasing an energy conversion efficiency on a secondary side, and improving heat radiation performance. The switching power source detects whether or not an overcurrent exceeding a reference value V_6 is passed to a switching element Q_1 , switches a first constant current I_3 and a second constant current I_4 smaller than the first constant current I_3 from one to another according to a result of the overcurrent detection, directly superposes the first constant current I_3 on a feedback voltage V_3 at an input part, superposes the second constant current I_4 on an output part where the feedback voltage is converted to have an impedance lower than that at the input part, and controls the ON-period of a pulse signal supplied to the switching element Q_1 according to a resultant feedback voltage, thereby achieving constant-current drooping control on a load 29.